

FIG. 1

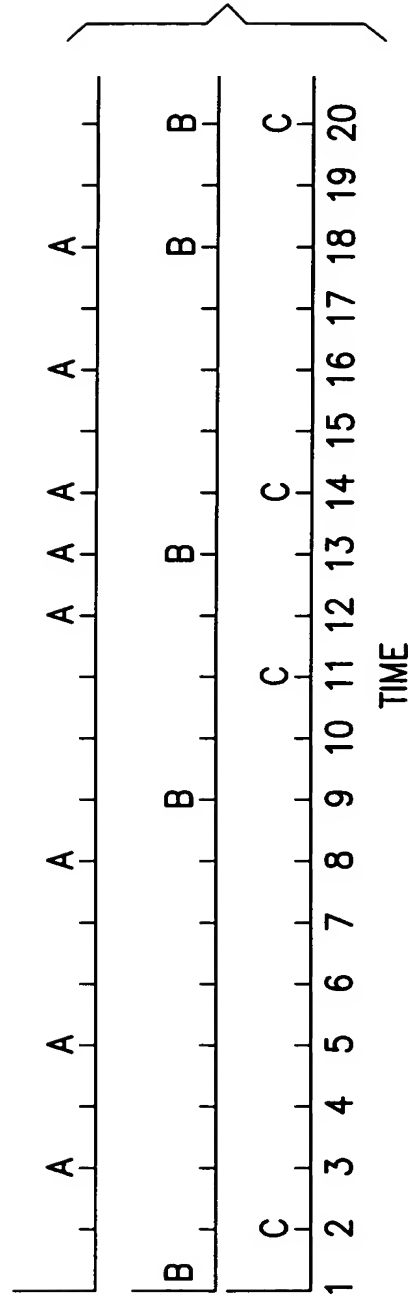
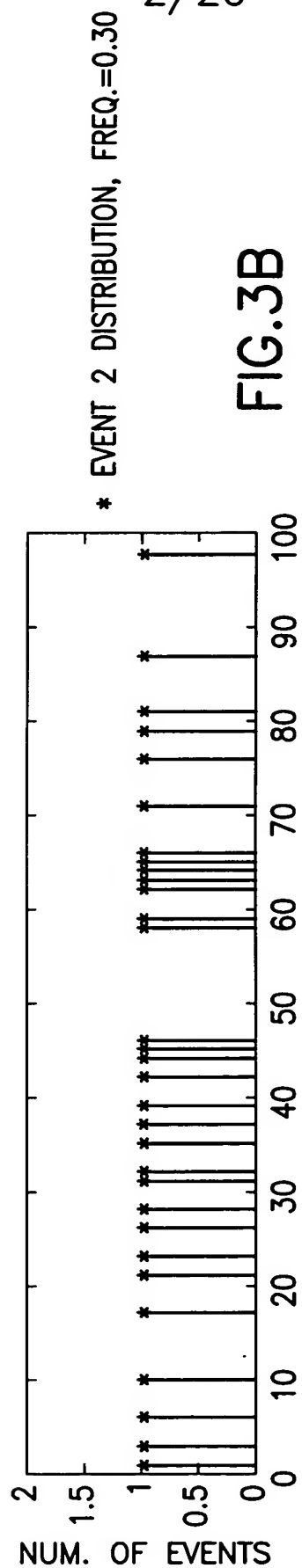
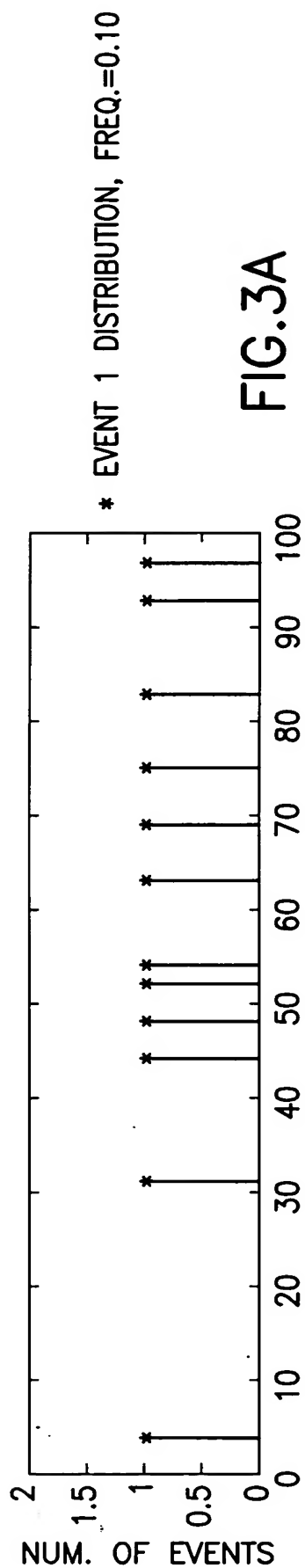
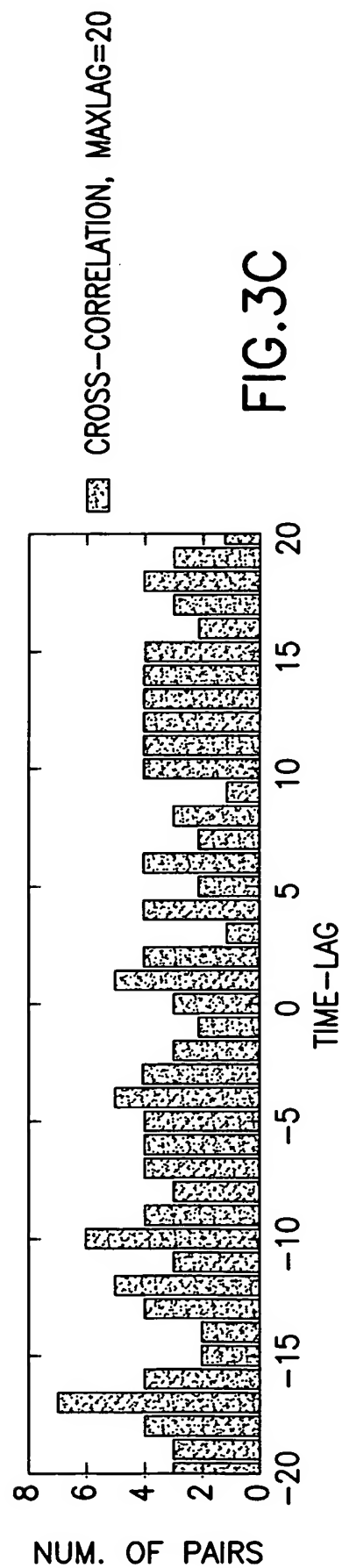
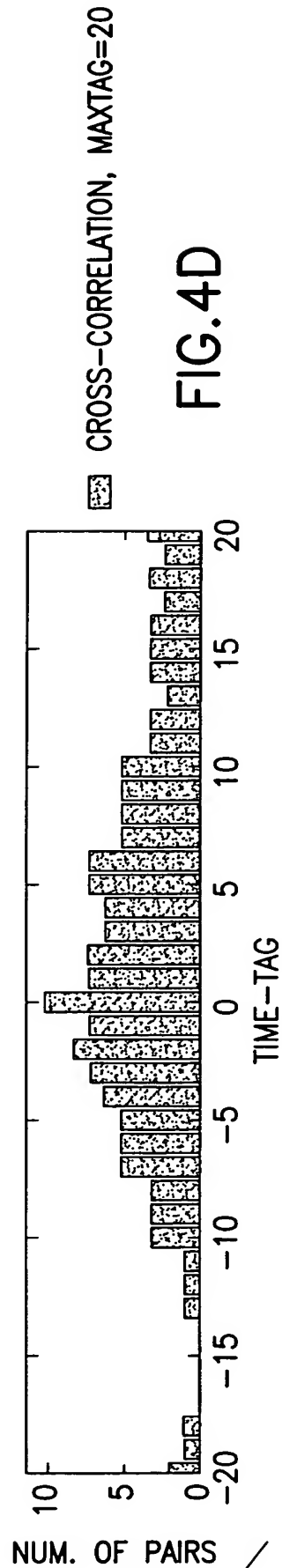
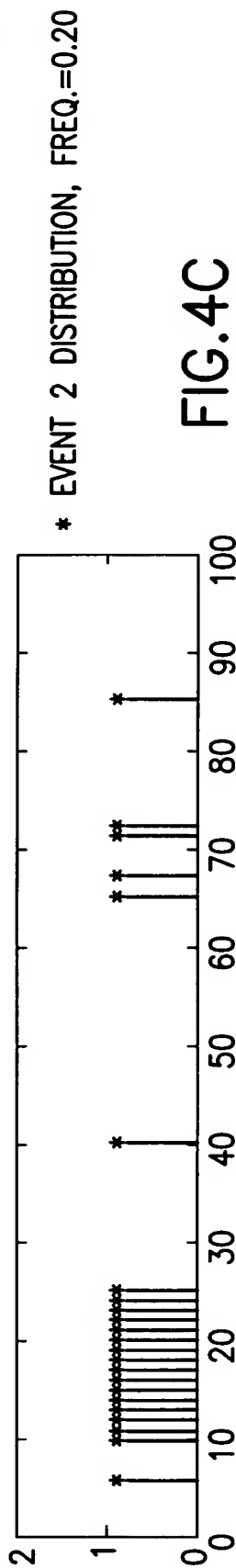
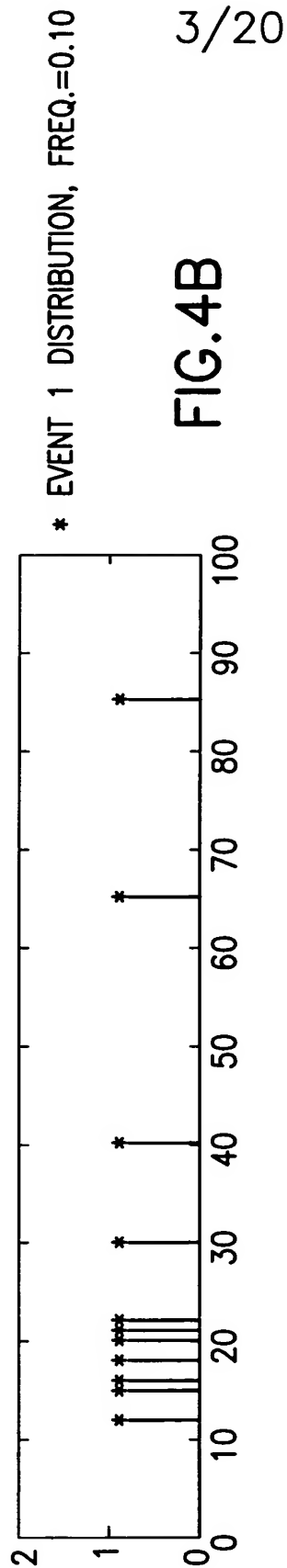
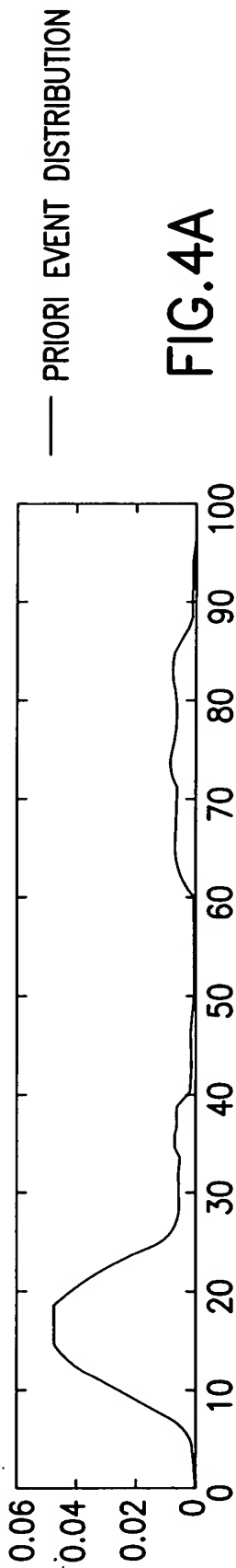


FIG. 2



2/20





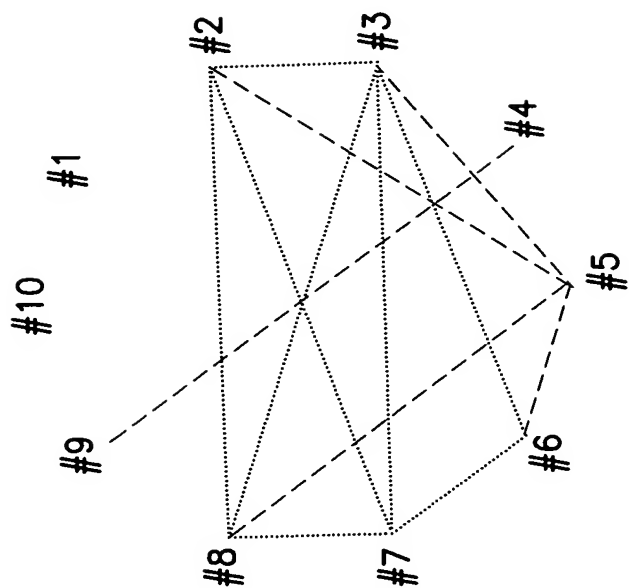


FIG. 5B

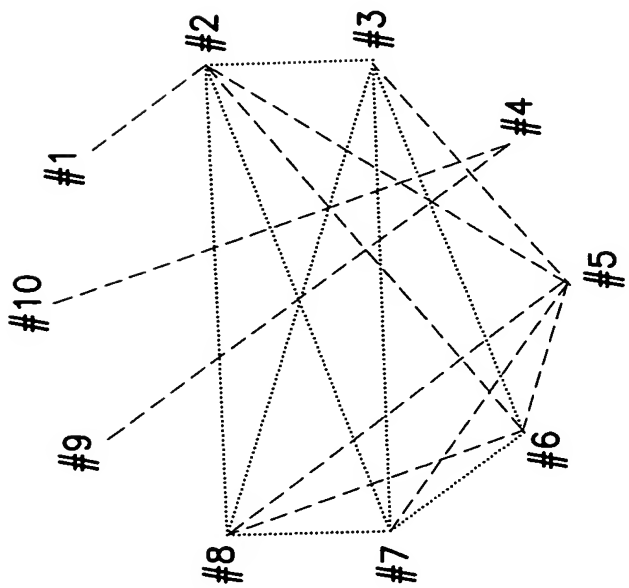


FIG. 5A

FIG. 6A1

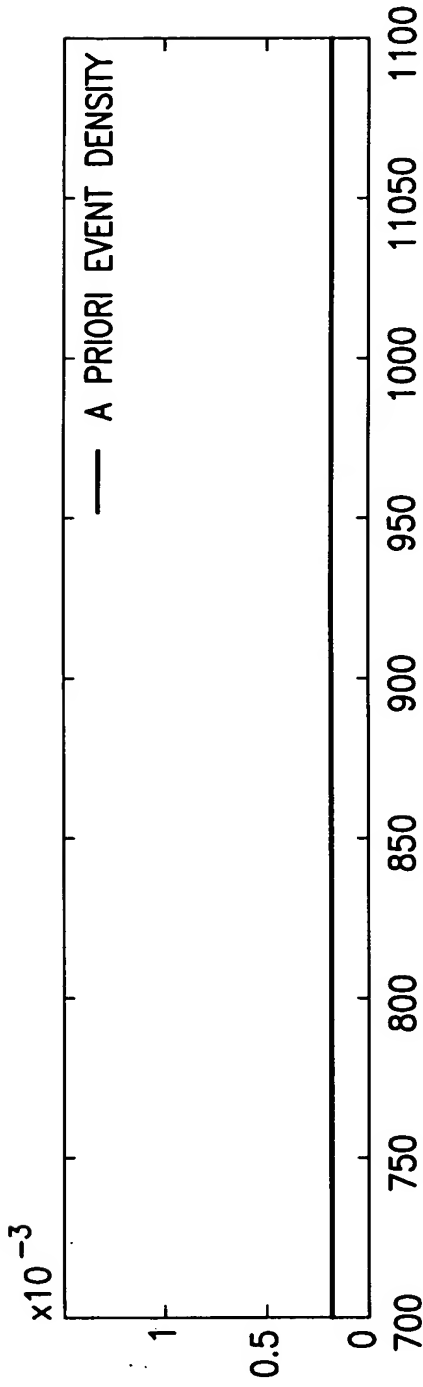


FIG. 6A2



FIG. 6A3

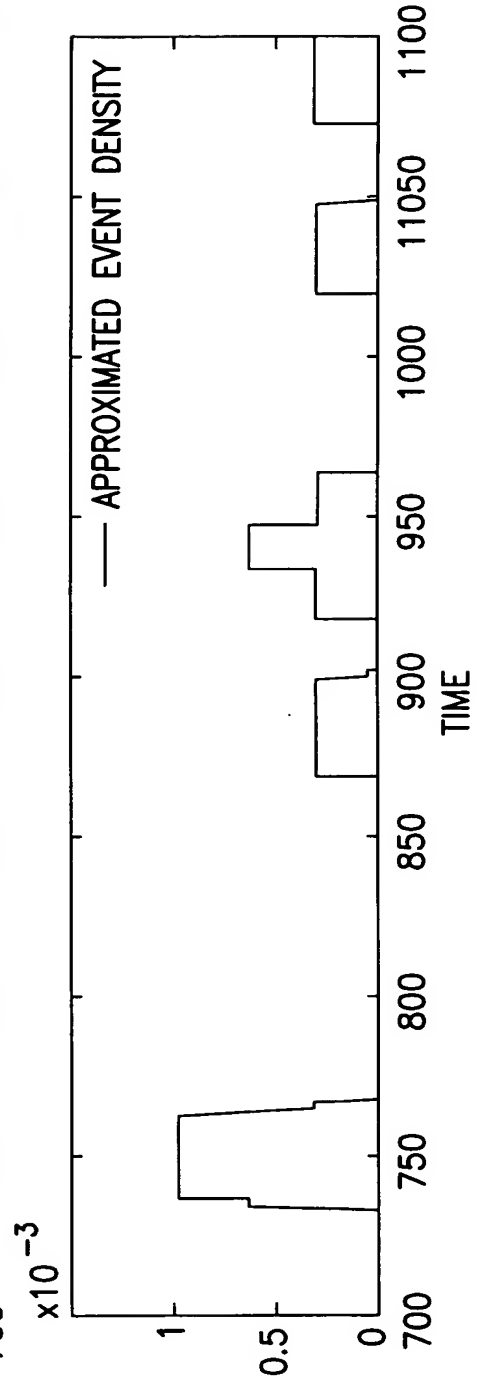


FIG. 6B1

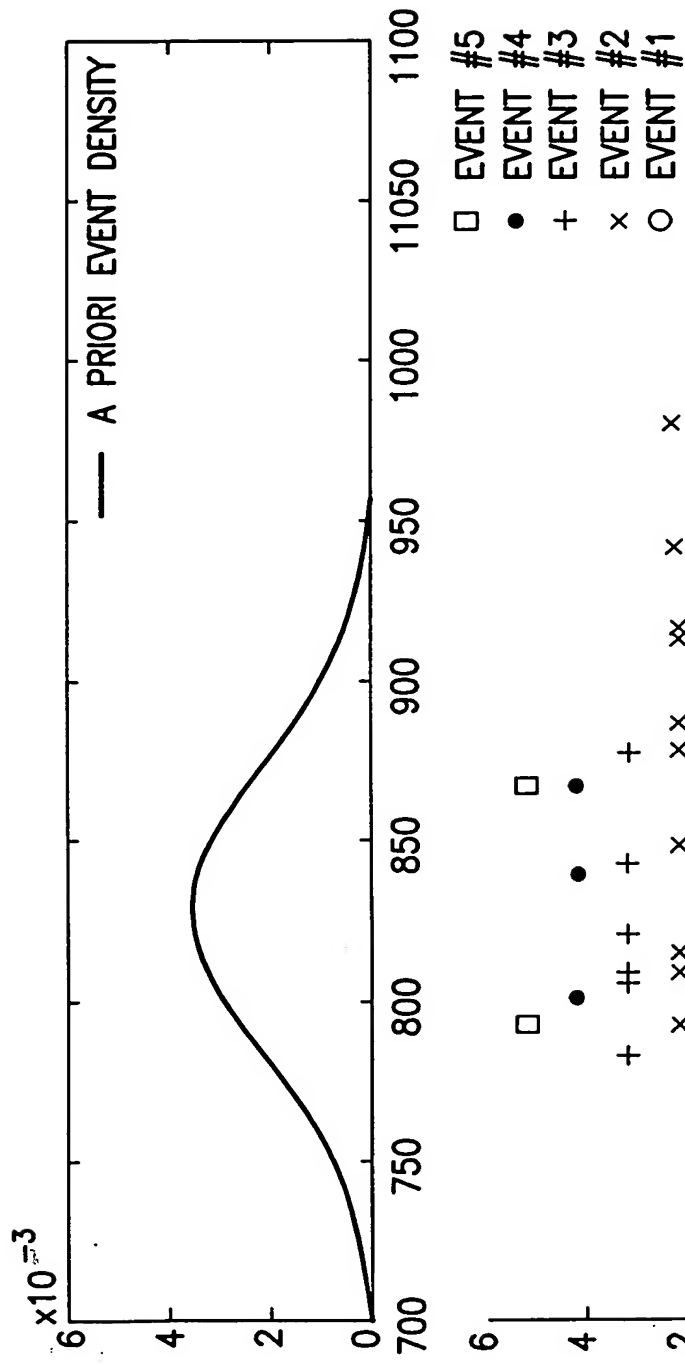


FIG. 6B2

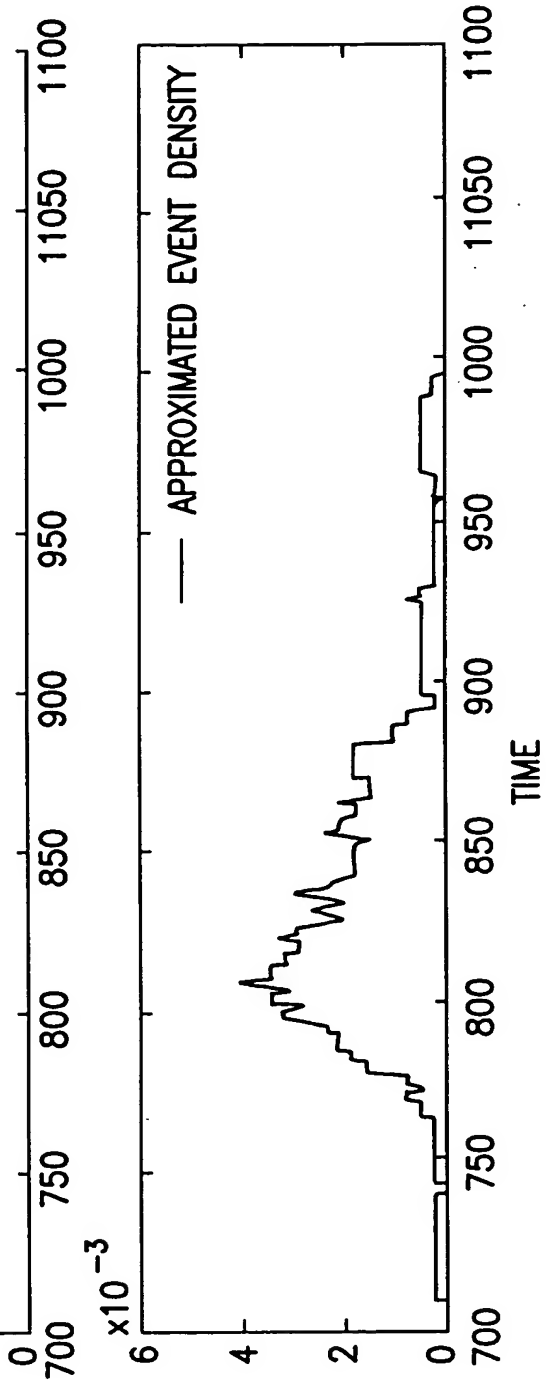


FIG. 6B3

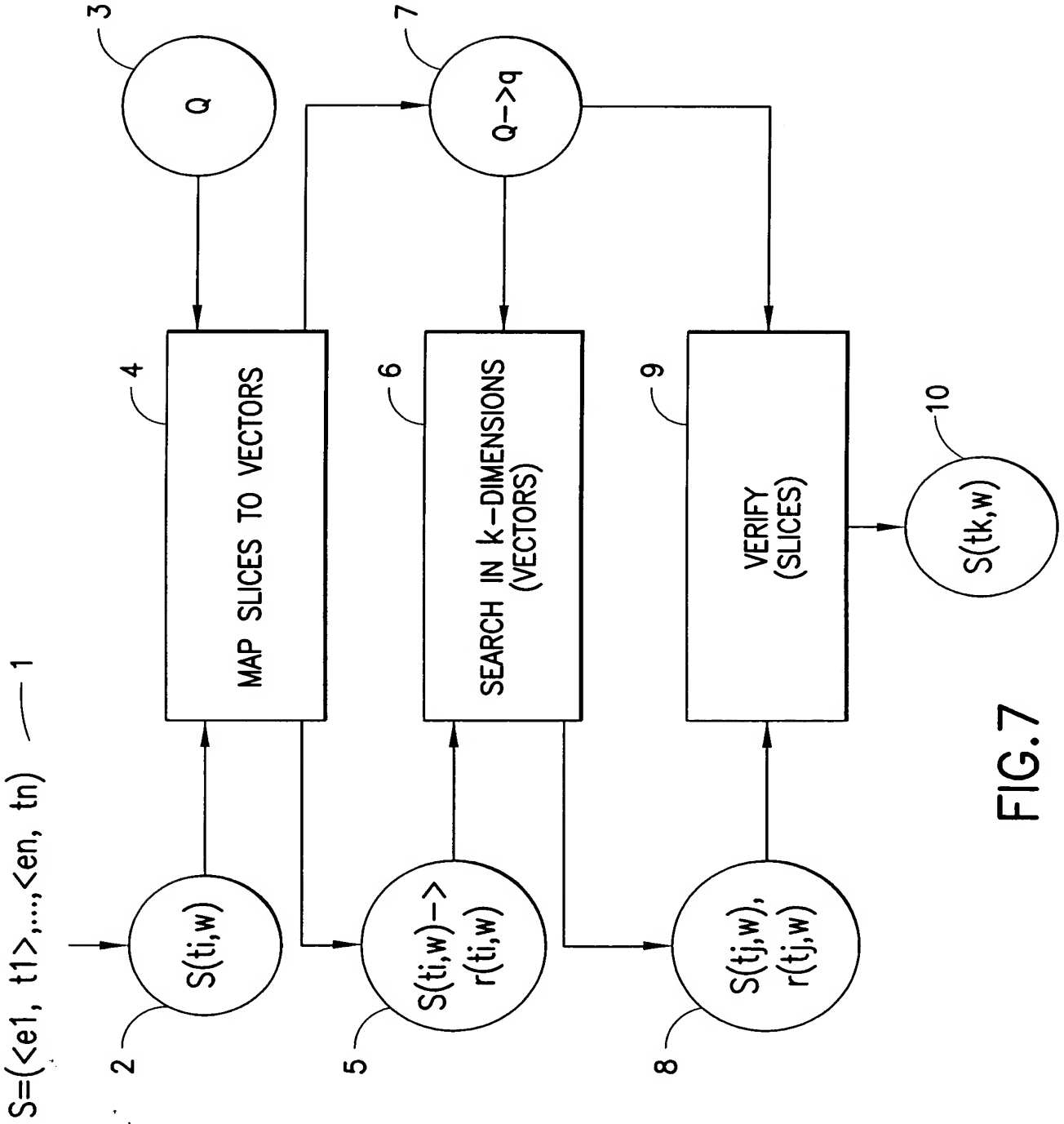


FIG. 7

RANDOM VARIABLES  $r$  PER EVENT  
TYPE  $e$  PER DIMENSION  $j$

$j=1$	$r_1(e_1) \dots r_1(e_t)$
.	.
.	.
.	.
$j=k$	$r_k(e_1) \dots r_k(e_t)$

22

OBSERVED TIME  
SERIES EVENTS  $1 \dots n$

$es_1, ts_1, \dots, es_n, ts_n$
---------------------------------

21

SEGMENTER

23

EVENT  
SEGMENTS  $1 \dots h$

$d_{11}, s_{11}, \dots, d_{1m}, s_{1m}$	$\dots$	$d_{h1}, s_{h1}, \dots, d_{hm}, s_{hm}$
-----------------------------------------	---------	-----------------------------------------

24

210

WEIGHTING FUNCTION  
GENERATOR

25

$j=1$	FOR $i=1 \dots m$	Sum $(r_1(d_{1i})f(t-s_{1i}))$
.	.	.
.	.	.
.	.	.
$j=k$	FOR $i=1 \dots m$	Sum $(r_k(d_{ki})f(t-s_{ki}))$

$\dots$

$j=1$	FOR $i=1 \dots m$	Sum $(r_1(d_{hi})f(t-s_{hi}))$
.	.	.
.	.	.
.	.	.
$j=k$	FOR $i=1 \dots m$	Sum $(r_k(d_{hi})f(t-s_{hi}))$

OBSERVED EVENT VECTORIZER

FIG. 8A

FIG. 8B

FIG. 8

FIG. 8A



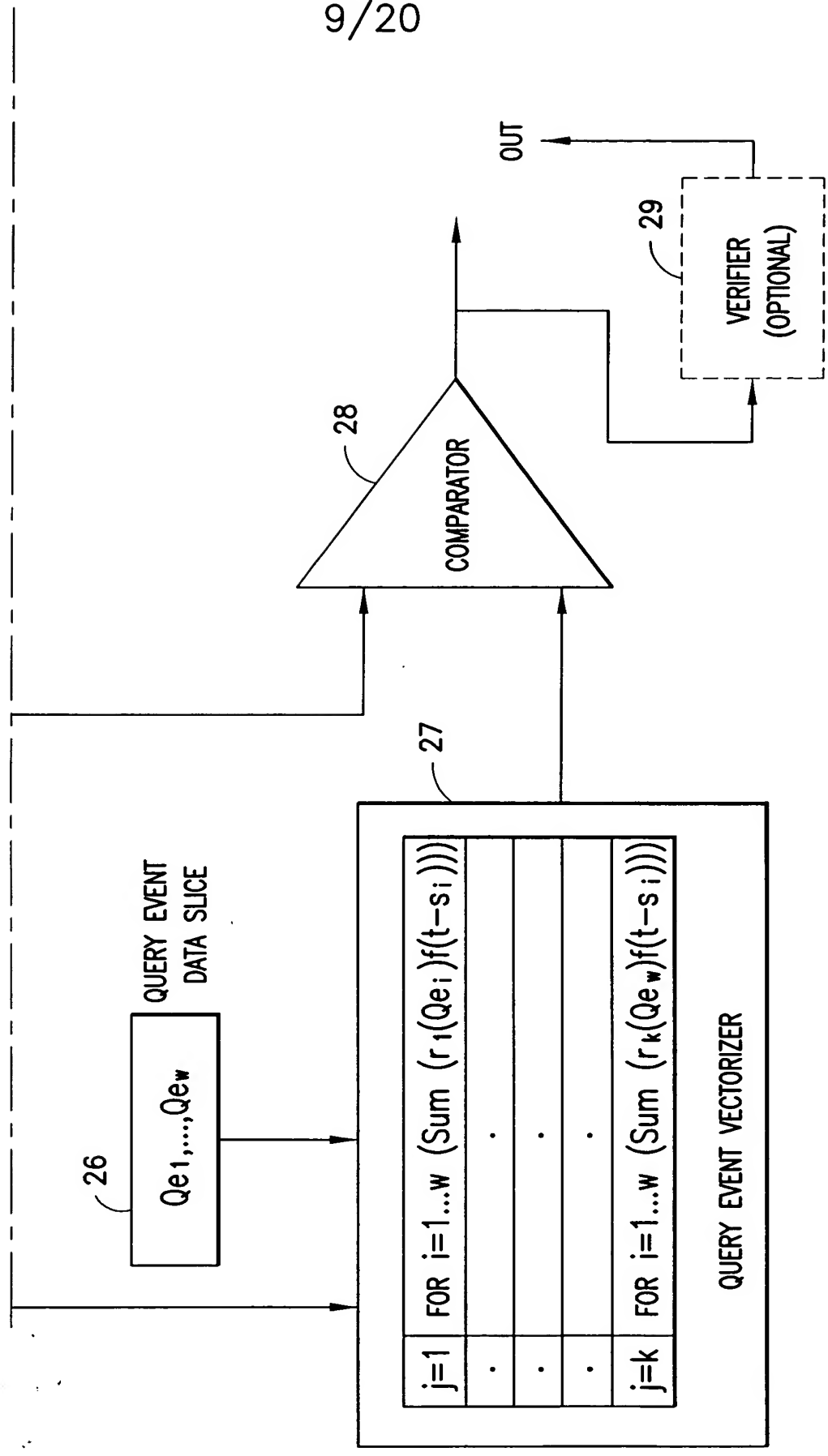


FIG.8B

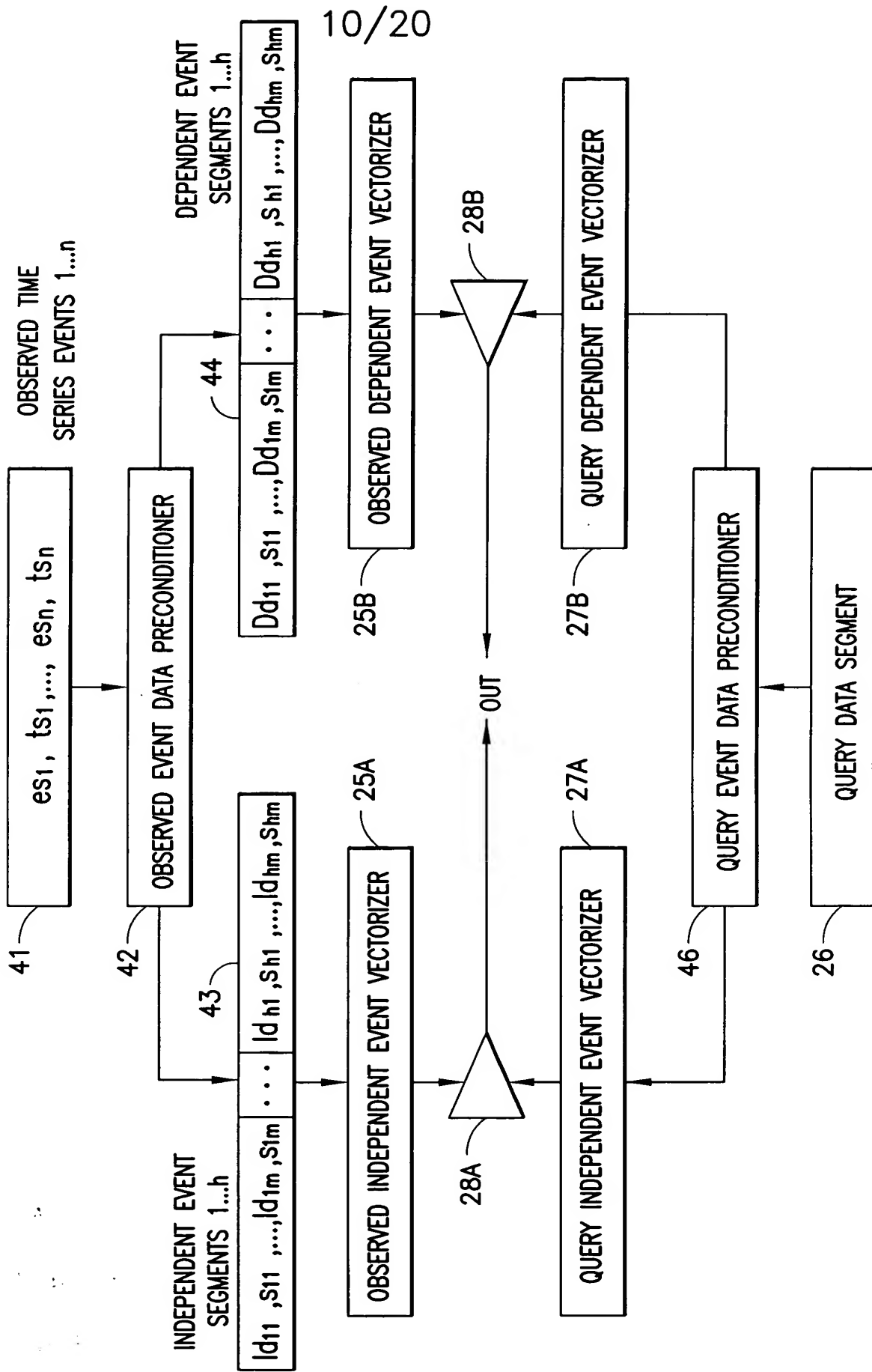


FIG.9

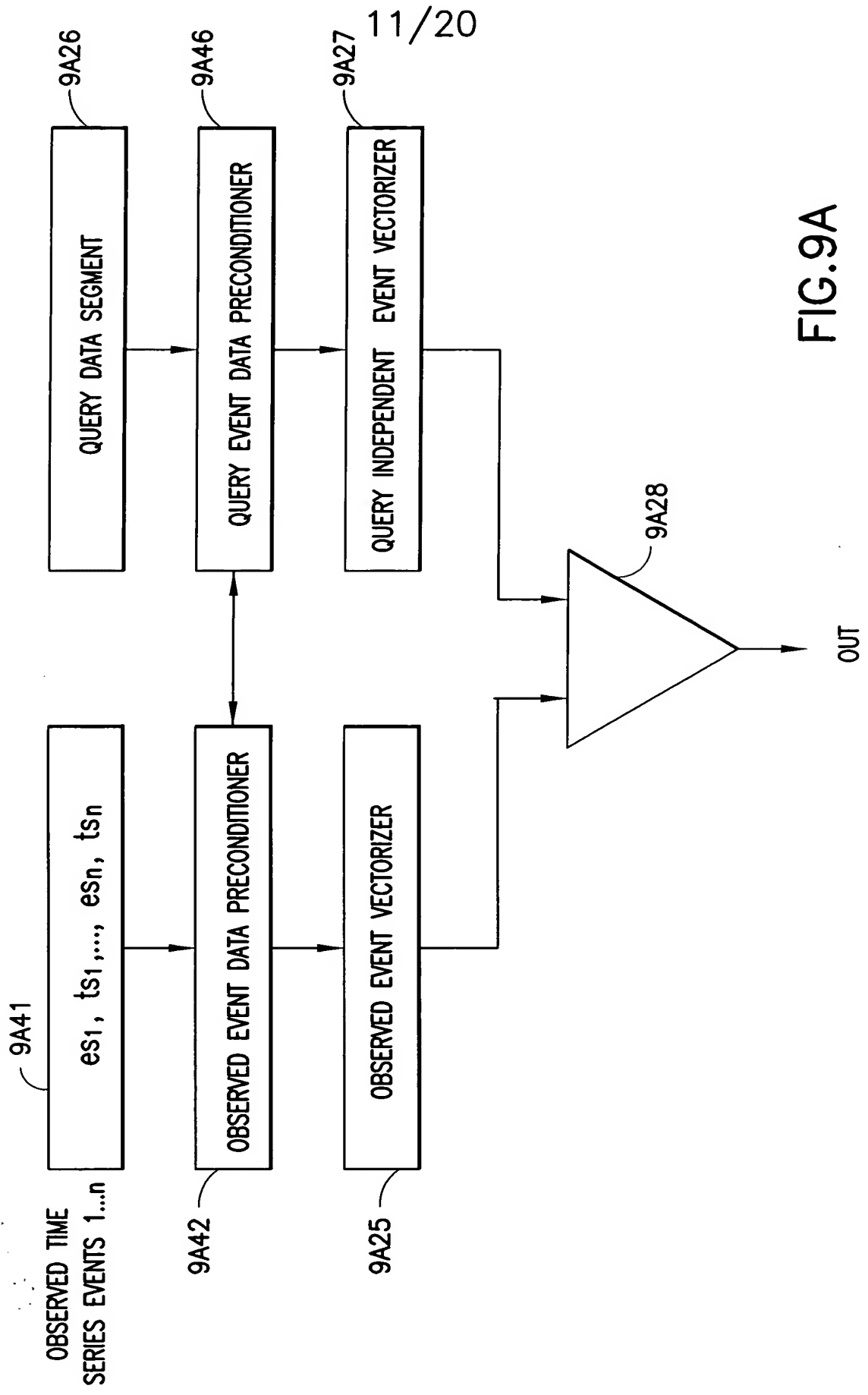
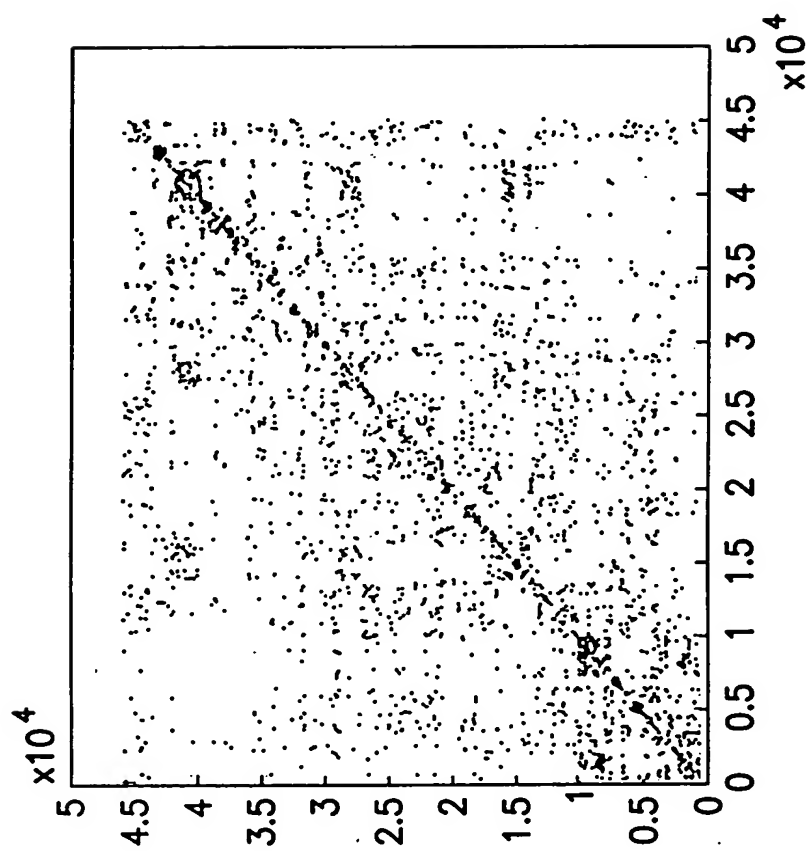


FIG. 9A

12/20



THE LOCATION OF THE CLOSEST SLICE TO THE QUERY SLICE,  
FOR EVERY 10th EVENT IN THE SEQUENCE AND FOR  $W=1000\text{sec}$

FIG.10

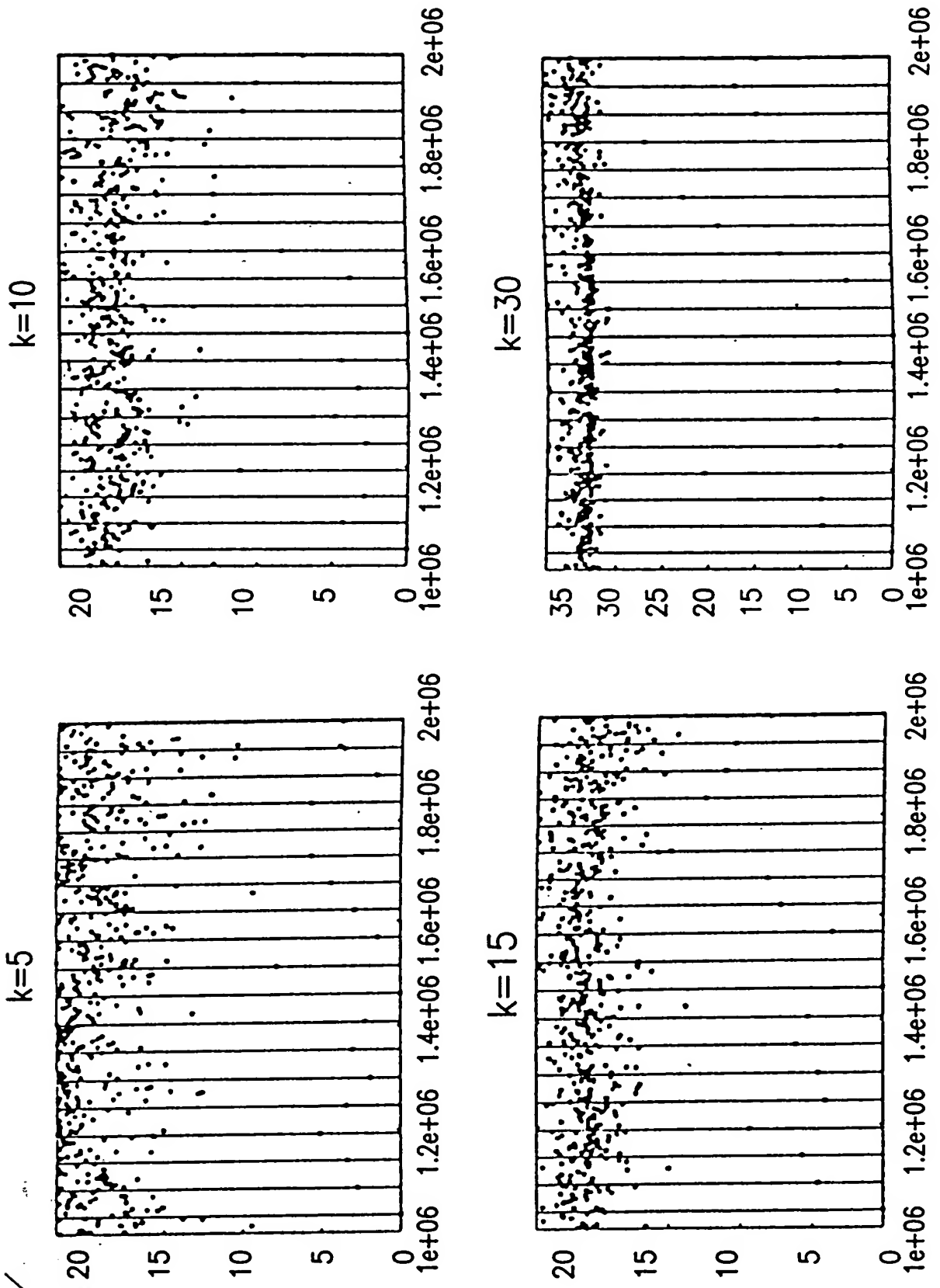


FIG.11

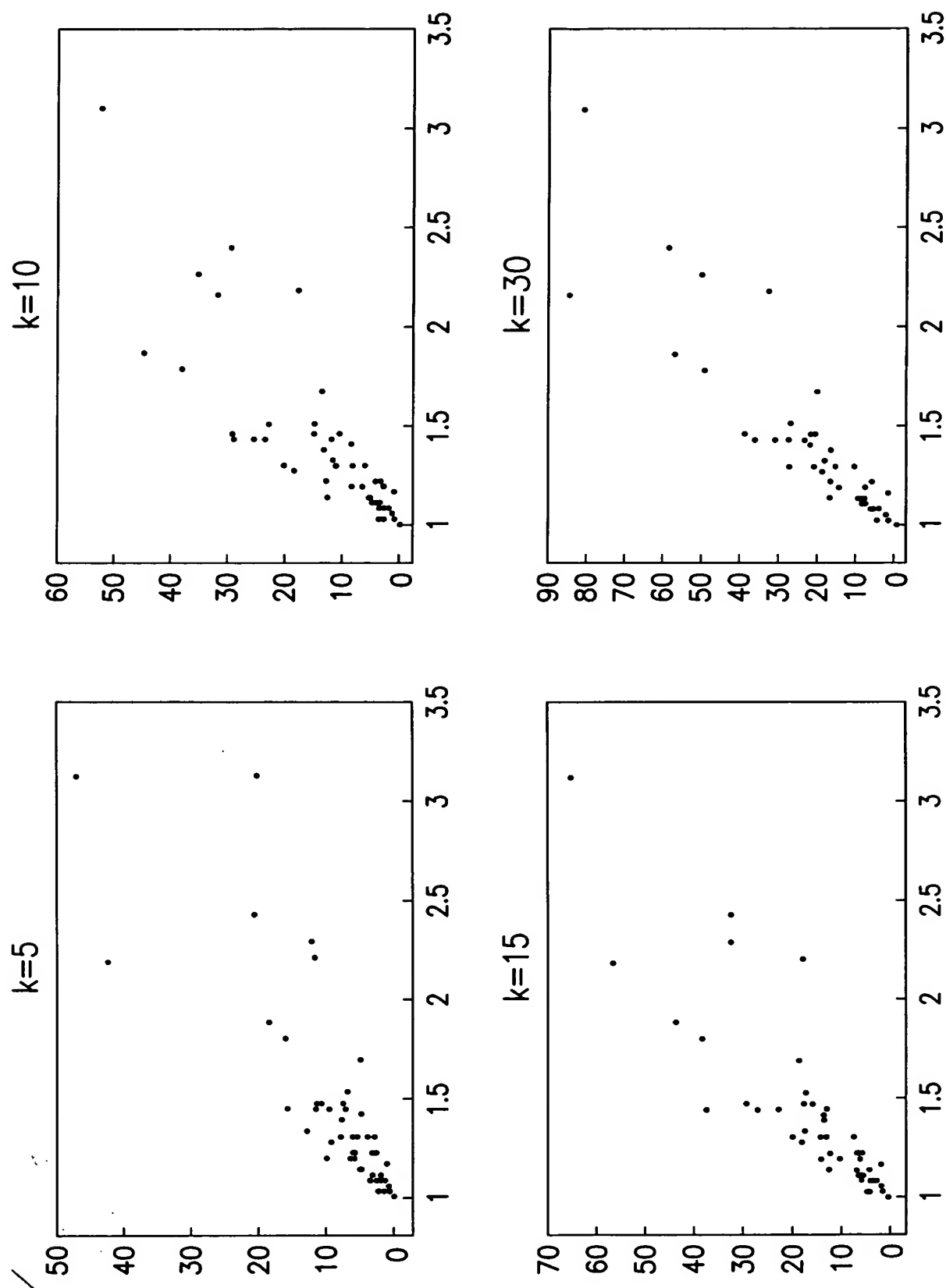


FIG.12

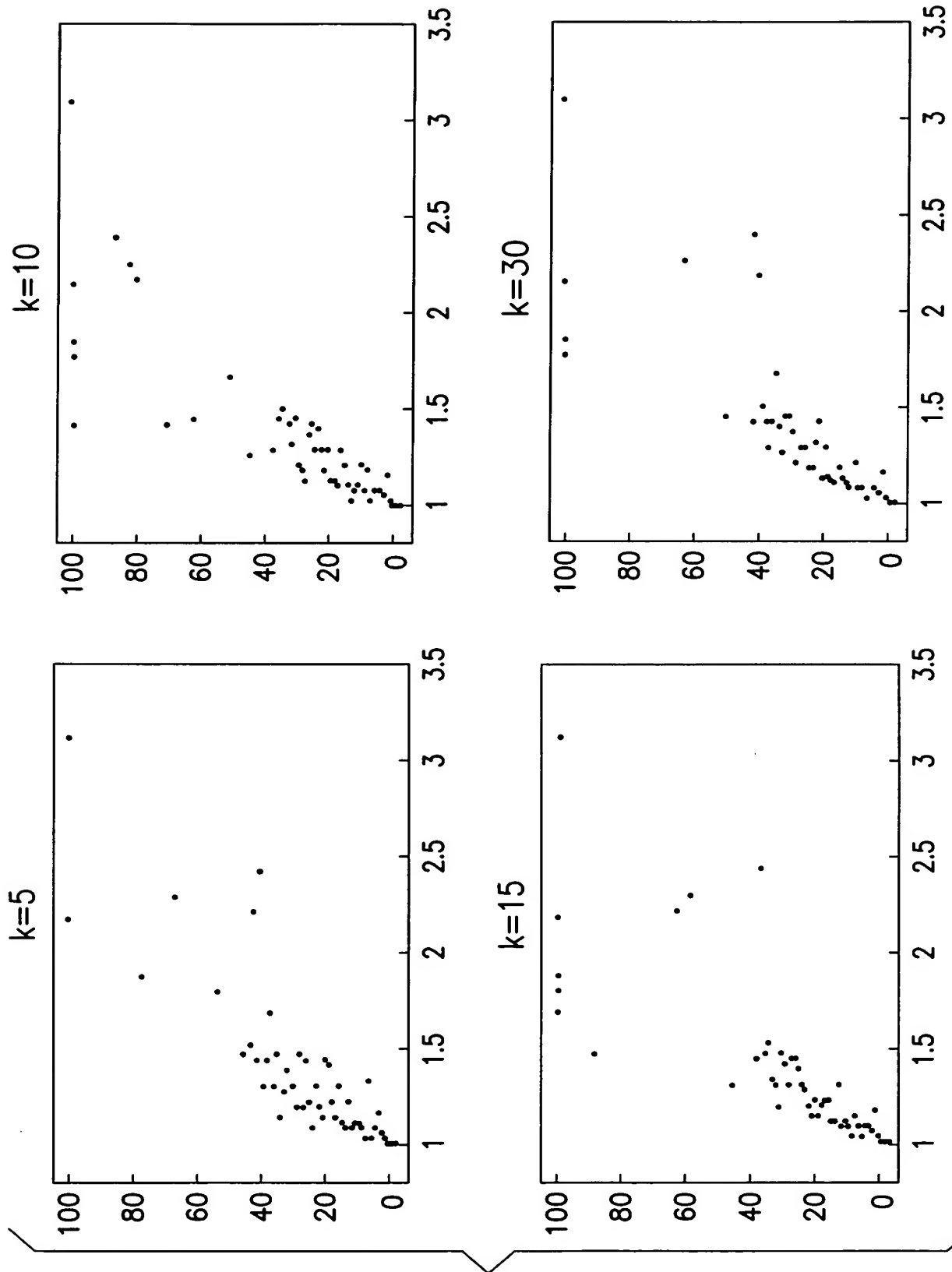


FIG.13

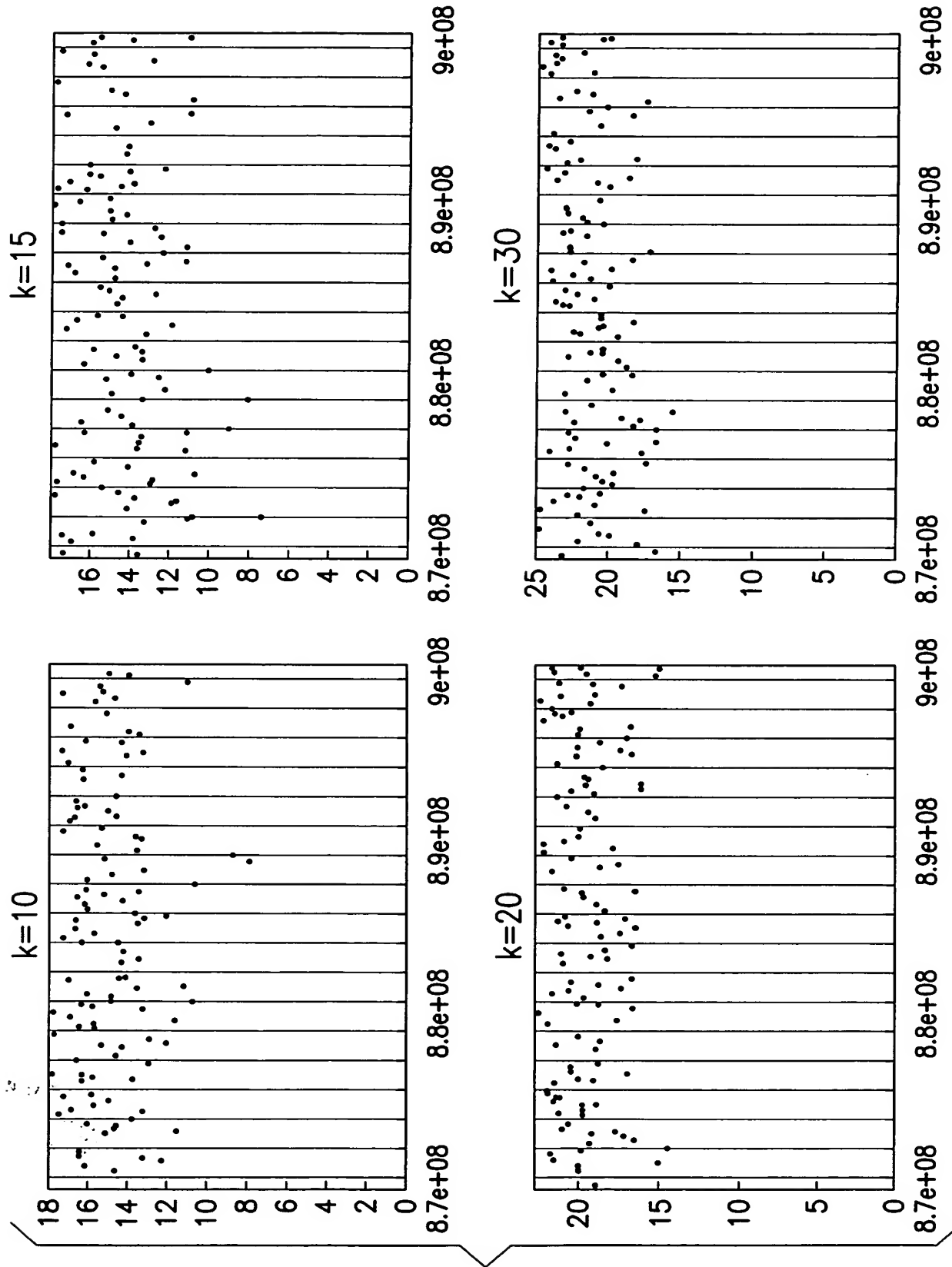


FIG.14



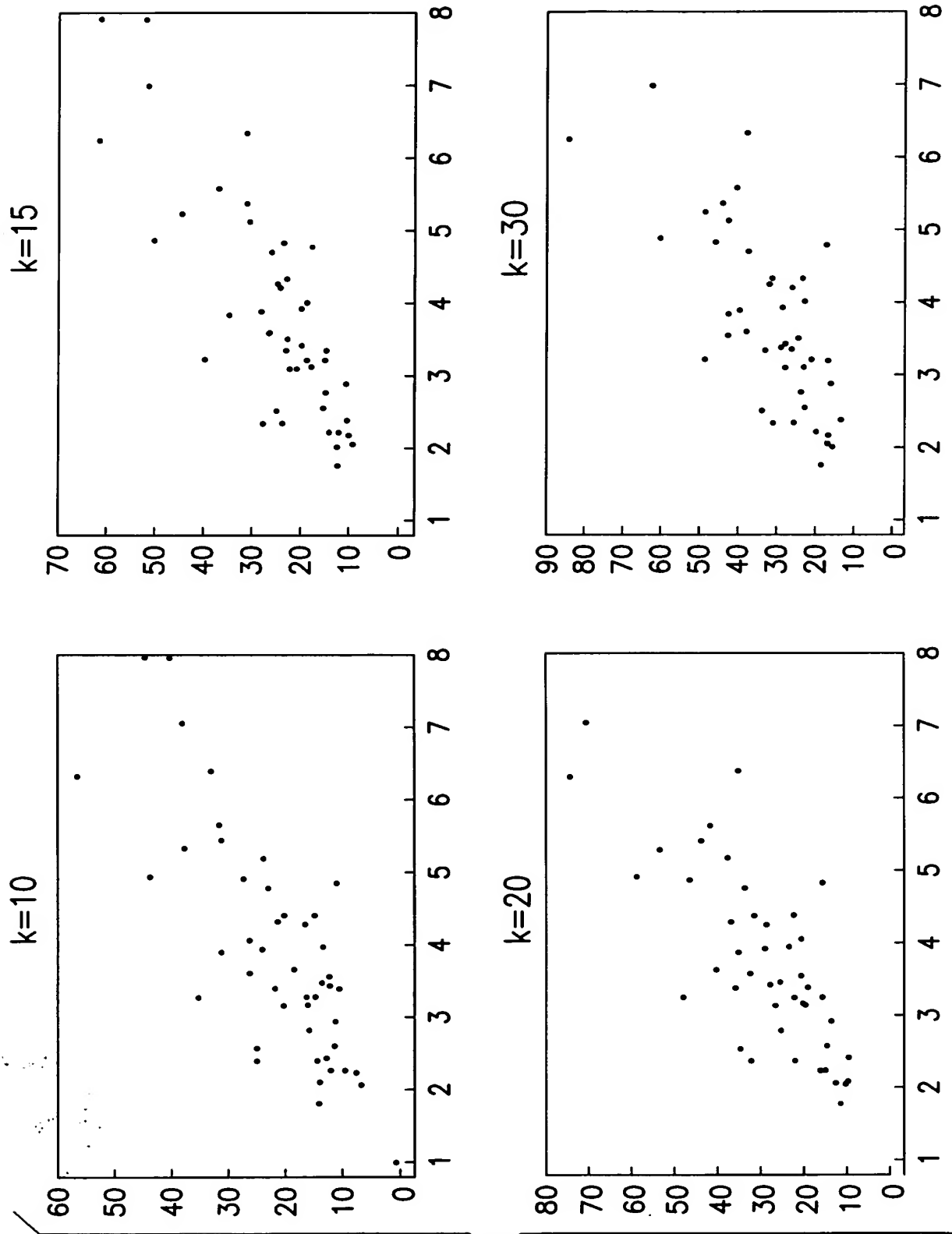


FIG.15

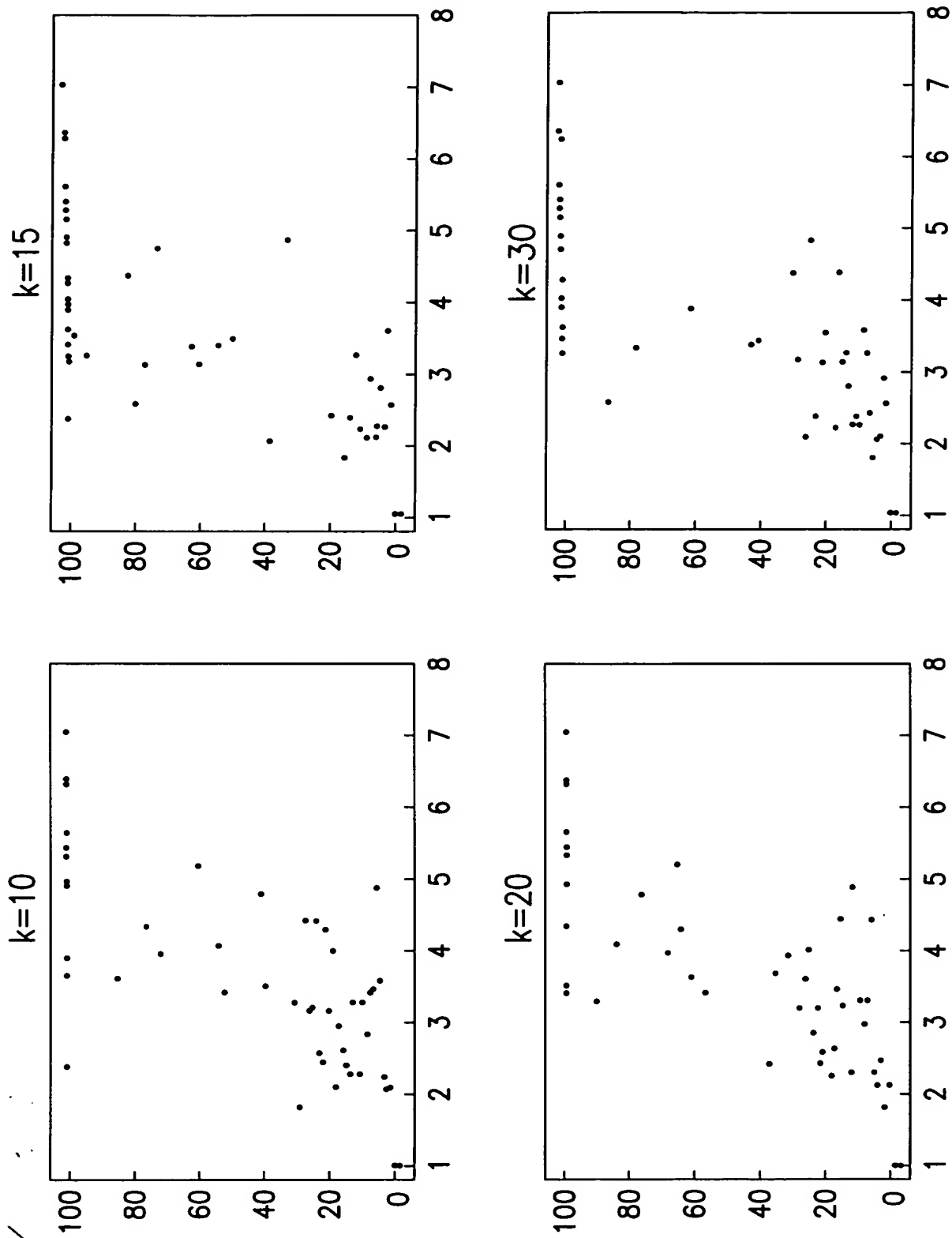


FIG.16

DIST	WINDOW	CLOSEST	OFFSET	DIST	WINDOW	CLOSEST	OFFSET
0.00	1461230	1461230	EXACT	8.11	1675060	1675440	-380
0.00	2157420	2157420	EXACT	8.41	3014113	3014260	-147
0.00	1032800	1032800	EXACT	8.57	2799882	2800050	-168
1.02	2210970	2210970	EXACT	8.58	979102	979249	-147
1.26	497272	497272	EXACT	9.32	1193557	1193460	97
1.32	711484	711484	EXACT	10.18	818800	818590	210
2.10	872143	872143	EXACT	10.26	2639124	2639390	-266
2.59	3067820	3067820	EXACT	10.42	1942820	1943200	-380
3.55	1568330	1568330	EXACT	10.49	2853333	2853600	-267
3.61	2425180	2425180	EXACT	11.02	2478783	2478730	53
3.68	604378	604378	EXACT	11.02	1889383	1889650	-267
4.00	657931	657931	EXACT	11.33	2103614	2103860	-246
4.04	1247010	1247010	EXACT	12.17	2692793	2692940	-147
4.55	1300570	1300570	EXACT	12.41	1835763	1836100	-337
4.57	925696	925696	EXACT	12.91	2906893	2907160	-267

FIG.17A

FIG.17B

FIG.17A

FIG.17

20/20

4.57	3121370	3121370	EXACT	13.14	2264140	2264520	-380
4.58	1086360	1086360	EXACT	13.75	3059438		MISSED
4.79	2532290	2532290	EXACT	13.77	1428734		MISSED
5.27	1407670	1407670	EXACT	14.08	2959387		MISSED
5.64	2371432	2371630	-198	14.17	755127		MISSED
5.70	1139910	1139910	EXACT	14.43	1961635		MISSED
5.82	2585840	2585840	EXACT	14.59	2053796		MISSED
6.13	1354120	1354120	EXACT	14.88	1729345	1728990	355
7.17	1621733	1621880	-147	15.01	1116290		MISSED
7.95	1996493	1996760	-267	15.26	2087183		MISSED

DIST = DISTANCE TO QUERY WINDOW  
 WINDOW = POSITION (TIME) OF WINDOW FOUND  
 CLOSEST = POSITION OF CLOSEST TARGET WINDOW, IF CLOSER THAN 1000  
 OFFSET = DIFFERENCE OF THIS WINDOW AND CLOSEST TARGET

FIG.17B